REMARKS

Claims 1-20 are pending in the application. Claims 19 and 20 were rejected under 35 U.S.C. §101 as being directed to non-statutory matter. Claims 14, 15 and 18 were rejected under 35 U.S.C. §102(b) as being anticipated by U.S. Patent Application Publication 2002/008228 A1 to Chiloyan et al. (hereafter Chiloyan). Claims 1-6, 8, 9-13, 15 and 19-20 were rejected under 35 U.S.C. §103(a) as being unpatentable over U.S. Patent 5,960,214 to Sharpe Jr., et al. (hereafter Sharpe) in view of Chiloyan. Claim 7 was rejected under 35 U.S.C. §103(a) as being unpatentable over Chiloyan in view of U.S. Patent 6,446,202 the Krivoshein et al. (hereafter Krivoshein). Claim 16 was rejected under 35 U.S.C. §103(a) over Chiloyan in view of U.S. Patent 6,694,354 to Elg. Finally, claim 17 was rejected under 35 U.S.C. §103(a) over Chiloyan in view of Sharpe. On all grounds Applicant respectfully traverses.

Turning first to the rejection of claims 19 and 20 as relating to non-statutory subject matter, the Examiner states that although a "computer system" is recited, it appears that a computer system would reasonable be interpreted by one of ordinary skill in the art as software, per se. Such an interpretation, however, is contrary to the plain meaning of the phrase "computer system." Webster's Ninth New Collegiate Dictionary (Webster's) defines "computer" as "a programmable electronic device that can store, retrieve and process data." Webster's defines "system" in part as "a group of devices or artificial objects or an organization forming a network, especially for distributing something or serving a common purpose such as <a telephone system>; <a heating system>; <a highway system>; <a data processing system>. Webster's definitions of computer and system both imply hardware. Computer software on the other hand is a series of instructions used to program a computer or computer system. One of ordinary skill in the art encountering the phrase "computer system" would not consider such a system to be software per se, but rather the various hardware components collected to perform one or more data processing functions, such a system may include the software instructions executed by the various hardware components to perform the desired data processing functions, but certainly is not limited to the software per se.

The fact that the claimed computer system includes various hardware components is further reinforced by various elements comprising the body of the claim. For example, claim 19 calls for a communication module operable to request a device description identification from one of a plurality of process control devices. Such a module may include software for formulating such a request, but hardware is required for carrying out the communication and actually transmitting the request to the targeted device. Further, claim 19 calls for a storage module operable to store the device description identification. Software "per se" is not capable of storing anything in and of itself. Software is only capable of instructing data to be stored in a specific physical location such as at a specific memory address in a computer memory or other machine readable storage device. Therefore, a storage module operable to store a device description identification inherently comprises more than mere software. For at least these reasons, the rejection of claims 19 and 20 under 35 U.S.C. §101 as being directed to non-statutory subject matter is improper and should be withdrawn.

Rejections Under 35 U.S.C. §102(b)

Next we turn to the rejection of claims 14, 15, and 18 as being anticipated by Chiloyan. Claim 14 is an independent claim from which claims 15 and 18 depend. Claim 14 calls for a computer system for updating a process control host application with a device description of a process control device. According to claim 14 the computer system comprises a processing unit, a computer readable memory, and a software routine stored on the computer readable memory which is executable on the processing unit. When executed by the processing unit the software routine causes the processor to receive a device description identification from a process control device. The device description identification identifies a device description associated with the process control device. The software routine further causes the processor to download a device description associated with the process control device from a device description data base using the device description identification, and update a host application with the device description.

Claims 14, 15 and 18 are not anticipated by Chiloyan because Chiloyan does not disclose a software routine which when executed by a processor causes the processor to receive a device description identification from a process control device; download a device description of a process control field device from a device description database using the device description

identification; and update a host application with the device description. Chiloyan discloses a method and system to access software pertinent to an electronic peripheral device at a network address determined based on a peripheral device identifier. As described in the summary of the invention (paragraph 008) a peripheral device identifier obtained from a peripheral device is used to determine a network address stored in a database, or generated by an algorithm. A remote device at the network address is accessed to obtain information related to the peripheral device. The method includes transferring at least one identifier from the peripheral device to a host device. A network address is then automatically determined by the host device based on the identifier, thereby enabling communication pertaining to the peripheral device to occur between the host device and a remote device. For example, the host device may download a device driver for the peripheral device from the remote device. Thus, the method includes at least one of the steps of retrieving software and/or other material from the remote device at the network address, automatically executing a program, installing a device driver, installing an application program, displaying a web page, registering a product, downloading documentation, downloading and installing firmware into the peripheral device, presenting help information, or accessing other material related to the peripheral device – all from the remote device accessed using the network address. (Chiloyan paragraph 0008).

The method disclosed by Chiloyan differs from the invention claimed in claim 14 in a number of ways. First, Chiloyan does not describe receiving a device description identification related to a process control field device. As described in the background section of the present application, field devices may include for example, valves, valve positioners, switches, transmitters, and sensors (e.g. temperature, pressure and flow rate sensors). The process control field devices may perform process control functions such as opening or closing valves and measuring process parameters. Chiloyan on the other hand discloses receiving a peripheral device identifier from a peripheral device. Chiloyan generally describes peripheral devices as devices that expand the functionality of a computing device. Specifically Chiloyan identifies input peripheral devices such as keyboards, pointing devices, microphones, joysticks, game pads, satellite dishes, scanners, digital cameras, and the like. Chiloyan further describes output peripheral devices such as printers, monitors, speakers and so forth. The peripheral devices described by Chiloyan are not equivalent to the process control field devices claimed in the present application. While expanding the functionality of a host computer system, the peripheral

devices disclosed by Chiloyan do not perform any functions related to controlling a process. Therefore, Chiloyan's disclosure of the step of receiving a peripheral device identifier does not anticipate the step of a software routine receiving a device description identification related to a process control field device as called for in claim 14 of the present application.

Next, Chiloyan does not disclose downloading the device description of a process control device from a device description database using the device description identification as called for in claim 14. First, Chiloyan does not disclose downloading a process control device device description. As mentioned in the background of the invention section of the present application, a device description is a formal description of the data and operating procedures employed by a process control field device, including variables, methods, commands, menus and display formats associated with various features of the device. Standardized digital communication protocols for the process control industry such as the Hart Communication Protocol or the Foundation Fieldbus Protocol specify the format and content of process control field device device descriptions. Thus, as used in the present application, a device description is a formal data structure for communicating information about a process control field device. Chiloyan does not disclose downloading a device description relating to a process control field device. Chiloyan only discloses downloading a device driver for a peripheral device, or retrieving software and/or other material (e.g., an application program, a web page, a product registration page, help information, documentation, or other material related to the peripheral device) from a remote device. A device driver, software, and other downloadable materials described by Chiloyan are not equivalent to a device description as claimed in claim 14 of the present application. Furthermore, the device driver software or other material downloaded according to Chiloyan is downloaded using a network address corresponding to a peripheral device identifier, not a device description identification as called for in claim 14.

Finally, Chiloyan does not disclose updating a host application with a device description as called for in claim 14. Paragraph 0031 of the present application describes an embodiment of the process of updating a host application with a device description. According to paragraph 0031, updating a host application may involve inserting the device description at various desired locations in the requesting application. Alternatively, the updating of an application with a device description of a process control field device may involve saving the device description

into a memory at a specific location and inserting calls to the specific memory location into the host application. Chiloyan, on the other hand, only discloses automatically executing a program, installing a device driver, installing an application program, displaying a web page, registering a product, downloading documentation, downloading and installing firm ware into a peripheral device, presenting help information, or accessing other material related to the peripheral device (Paragraph 0008). Nowhere does Chiloyan disclose updating a host application with a process control device device description as called for in claim 14 and as described in the specification. For these reasons, independent claim 14 and dependent claims 15 and 18, which depend therefrom, are not anticipated by Chiloyan and should be allowed.

Claim Rejections Under 35 U.S.C. § 103

Next we turn to the rejection of claims 1-6, 8, 9-13, 15, and 19-20 as being unpatentable over Sharpe in view of Chiloyan. Again, Applicant respectfully traverses. First we note that claims 1, 9, and 19 are independent claims. Claims 2-6 and 8 depend from claim 1, claims 10-13 depend from claim 9, and claim 20 depends from claim 19. Claim 15 depends from claim 14 which was rejected under 35 U.S.C. § 102(b) as discussed above. Claim 1 calls for a method of updating a host application running on a host system in a process plant, wherein the host system is connected to a plurality of process control devices used in the process plant. Claim 9 calls for a method of providing a software update for a host application running on a host system. Claim 19 calls for a system for use in a process plant having a plurality of process control devices and one or more process applications requiring communication with the plurality of process control devices. Finally, as described above, claim 14 calls for a computer system for updating a process control host application with a device description database via a communication network.

The Examiner points to Sharpe as teaching the invention substantially as claimed. According to the Examiner, Sharpe col. 4, lines 47-49 teaches a method of updating a host application running on a host system. The cited passage, however, states only that "adding a new smart device to a process therefore requires the management system for that process to be reprogrammed." Rather than teaching a method of updating a host application, the cited passage merely mentions the need to update a host (management system) application when a new smart device is added to a process. Sharpe does not disclose at column 4, lines 47-49, or elsewhere, a

method or system for actually performing such reprogramming. On the contrary, Sharpe actually teaches a management system which provides a consistent and generalized communication connection between an application and multiple devices connected to the system so that no new programming is necessary to communicate with and display information pertaining to a newly added smart device (Col. 4, line 6 - col. 5, line 4). In relation to the invention claimed in the present application, Sharpe appears to disclose only a host application running on a host system in a process plant wherein the host system is connected to a plurality of process control devices used in the process plant. Sharpe does not teach a method or system for updating the host application with a device description from a new process control field device.

The Examiner admits that Sharpe does not explicitly teach sending a first command from the host system to a device to request a device description identification; receiving a device description identification at the host system; downloading a device description associated with the device description identification; and updating the host application to include the device description. For these elements of the claimed invention, the Examiner relies on the teaching of Chiloyan. However, as has already been discussed at length with regard to the rejection of claims 14, 15, and 18, Chiloyan does not disclose receiving a device description identification from a process control field device; downloading a device description of a process control field device from a device description data base using the device description identification, and updating a host application with the device description, all of which, in one form or another, are elements of claims 1-6, 8, 9-13, 15, and 19-20. Since these claimed features of the invention are not taught or suggested by Sharpe or Chiloyan, alone or in combination, claims 1-6, 8, 9-13, 15, and 19-20 would not have been obvious to one of ordinary skill in the art at the time the invention was made and should be allowed.

Next, we turn to the rejection of claim 7 under 35 U.S.C. § 103(a) as being unpatentable over Chiloyan in view of Krivoshein. According to paragraph 28 of the office action, Perlman (Chiloyan?) does not explicitly teach wherein the device description database is one of a Fieldbus database, a Profibus database and a HART Communication Foundation database. According to the Examiner, however, Krivoshein teaches a device description database which is one of a fieldbus database, a profibus database and a hart communication foundation database. Again Applicant traverses.

Applicant assumes the reference to Perlman in paragraph 28 is mistaken and that the Examiner is actually referring to Chiloyan. As mentioned above, Chiloyan does not disclose a software routine which when executed by a processor causes the processor to receive a device description identification from a process control device; download a device description of a process control field device from a device description database using the device description identification, and updating a host application with the device description. Furthermore, Krivoshein does not in fact teach a device description database which is one of: a fieldbus database, a profibus database, and a hart foundation database. In fact, the passage in Krivoshein cited by the Examiner does not disclose a device description database whatsoever. The Examiner points to Krivoshein Fig. 2, element 84 as teaching a fieldbus device description database, element 80 as teaching a profibus device description database, and element 86 as teaching a HART device description database. According to the Examiner, these "template databases" store information needed to configure devices of the different device networks (col. 13, lines 66-67 – col. 14, line 1). However, expanding the cited passage to include column 13, line 61 – col. 14, line 9, it is clear that the templates 80, 84, 86 of Fig. 2 are not device description databases at all. The network templates 80-86 store "the questions or other dialog used by a user input routine to obtain or change device or network information. The user input routine uses data stored in templates 80-86 to request the particular information necessary to configure and document different types of device networks and the devices within such networks. Clearly, the templates 80-86 do not store device descriptions, and it is untenable to describe them as device description databases. Accordingly, even when combined, Chiloyan and Krivoshein do not teach the invention claims in claim 7.

Applicant next turns to the rejection of claim 16 as being unpatentable over Chiloyan in view of Elg. Claim 16 depends from claim 14. As has already been argued with respect to claim 14, Chiloyan does not disclose a software routine executable by a processing unit to receive a device description identification related to a process control device from a process control device; download a device description of the process control device from the device description database using the device description identification; and update the host application with the device description. Furthermore, these features of the claimed invention are not taught or suggested by Elg. Claim 16 is allowable over Chiloyan and Elk for these reasons alone. Even further, however, the Examiner cites Elg as teaching a software routine executable on a

processing unit to identify a device description language source of the host application, interpret the device description into the device description language source, and insert the device description into the host application. Elg, however, discloses no such things. Elg is directed to a system forming an interface between a host computer and a peripheral device in a typical computer system. Like Chiloyan, Elg teaches nothing regarding a host application communicating with process control field devices in an industrial process plant environment. Elg also teaches nothing regarding updating such a host application with a process control field device device description. Specifically, Elg does not teach a software routine that identifies a device description language source of a host application. The Examiner points to Elg Fig. 3 and column 3, lines 39-44 as teaching a software routine that identifies a device description language source of a host application, but the cited portions of Elg teach nothing of the kind. Elg teaches instead a host inserting a platform/operating system identifier into a URL. The URL may then act as a pointer to an FTP site where a peripheral device driver or other information relating to a peripheral device may be stored. The Examiner appears to equate a device driver with a device description. Further, the Examiner appears to equate inserting the platform/operating system identifier into a URL pathname with interpreting a device description into the identified device description language source as claimed in claim 16 of the present application. However, inserting the platform/operating system identifiers into the URL as taught by Elg is merely an algorithm for building a pointer that points to a location where additional information and/or software pertaining to a computer peripheral device is stored. There is no interpreting taking place, and there is no insertion of a device description into a host application. Accordingly, the combined teaching of Chiloyan and Elg utterly fails to disclose the claimed features of claim 16 of the present invention. For these reasons, claim 16 is not unpatentable over Chiloyan and Elg and should be allowed.

Finally, claim 17 stands rejected over Chiloyan in view of Sharpe. Claim 17 depends from claim 14. As has already been argued, claim 14 is allowable over Chiloyan. Sharpe is cited against claim 17 as teaching a host application comprising an asset management application, a plant simulation application, a plant maintenance application, a plant monitoring application, or a process control application. Applicant takes no position regarding whether or not Sharpe in fact discloses the various host applications indicated by the Examiner. Even if Sharpe does in fact disclose the various host applications indicated by the Examiner, Sharpe

nonetheless fails to disclose the various features of the base claim (claim 14), absent from Chiloyan, as discussed above with regard to the rejection of claim 14. For these reasons claim 17 is allowable over the combined teaching of Chiloyan and Sharpe.

For the above reasons all claims in the pending application are allowable over the art of record. Applicant respectfully requests that the Examiner allow the claims and move the application to issue. If there are any questions regarding the present response, the Examiner is encouraged to call the Applicant's attorney at the number provided below.

Dated: April 29, 2008

Respectfully submitted,

By: /Jeffrey H. Canfield/
Jeffrey H. Canfield
Registration No.: 38,404
MARSHALL, GERSTEIN & BORUN LLP
233 S. Wacker Drive, Suite 6300
Sears Tower
Chicago, Illinois 60606-6357
(312) 474-6300
Attorney for Applicant